PATENT ABSTRACTS OF JAPAN

(11)Publication number : **11-035557**
(43)Date of publication of application : **09.02.1999**

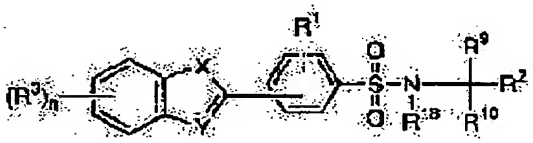
(51)Int.CI. C07D209/10
A61K 31/34
A61K 31/38
A61K 31/40
A61K 31/405
A61K 31/415
A61K 31/42
A61K 31/425
C07D209/20
C07D235/06
C07D263/56
C07D277/66
C07D307/79
C07D333/60
C07D403/12
C07D405/12
C07D409/12
C07D413/12
C07D417/12
// C07M 7:00

(21)Application number : **09-207402**
(22)Date of filing : **17.07.1997**

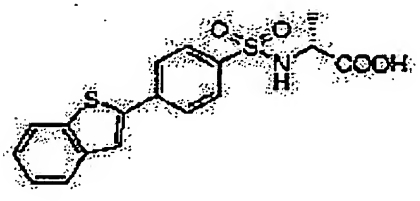
(71)Applicant : **ONO PHARMACEUT CO LTD**
(72)Inventor : **TAKAHASHI KANJI**
SUGIURA TSUNEYUKI

(54) PHENYLSULFONAMIDE DERIVATIVE

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain the subject new compound having an inhibitory effect against matrix metalloproteinase (e.g. gelatinase and collagenase) and useful for the prevention and/or treatment of rheumatism, osteoarthritis, osteoporoses, etc.
SOLUTION: The subject compound is a phenylsulfonamide derivative of formula I [R1 is H or a 1-4C alkyl; R2 is COOR4 (R4 is H, a 1-8C alkyl, etc.), etc.; R3 is H, a 1-4C alkyl, a halogen, etc.; (n) is an integer of 1-4; R9 and R10 are each independently H, a 1-8C alkyl, etc.; R18 is H, a 1-4C alkyl, a 1-8C alkoxycarbonyl, etc.; X is O atom, S atom, etc.; Y is CH or N atom] or a nontoxic salt thereof, and for example, N-[4 -(2-benzothienyl) phenylsulfonyl] -D-alanine of formula II is cited. The compound of formula I is obtained by using a corresponding heterocyclic compound with a t-butyl ester (hydrochloride) of a corresponding amino acid by the well-known method.



I



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]